ecoNews Wire

IOWA DEPARTMENT OF NATURAL RESOURCES

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WATER MONITORING PLAN DEVELOPED FOR ROCK CREEK LAKE TO DETERMINE BACTERIA SOURCES

DES MOINES — A water monitoring plan has been developed for Rock Creek Lake in Jasper County to determine why bacteria levels have sometimes been elevated at the state park beach.

Water samples will be taken from a total of 22 sites in the lake and around the watershed. Additional water samples will be taken from the beach during peak usage times and during low use periods to determine if bacteria levels go up when more swimmers are present. Samples will also be taken to determine if bacteria is being trapped by sediment at the beach.

Rock Creek Lake, located northeast of Kellogg, is one of Iowa's most heavily visited parks and is the second most popular camping destination among state parks.

"Rock Creek Lake is a very important recreational resource for the state of Iowa and it is important that we try and determine why bacteria levels have sometimes been high," said Janice Boekhoff of the DNR.

A swimming advisory due to elevated fecal coliform bacteria levels was posted for two weeks at the Rock Creek beach in late June and early July. Unlike most of the other state park beaches, rainfall does not appear to be as big of factor for elevated bacteria levels at Rock Creek.

The water monitoring plan will seek answers to four main questions:

- Is the bacteria level higher on the weekend when larger numbers of swimmers are present?

- Does the suspension of fine sediment from the bottom of the lake cause higher levels of bacteria?

- Does any area of the beach or lake contribute higher levels of bacteria than others?

- Are septic systems from residential areas near the lake an issue?

There is currently a watershed project ongoing at Rock Creek Lake. If problem areas can be determined through the monitoring, best management practices to reduce bacteria can be developed to for the watershed as part of the project, according to Ubbo Agena, coordinator of the Nonpoint Source Pollution program for DNR.

For more information, contact Kevin Baskins at (515) 281-8395 or Janice Boekhoff at (319) 335-1574.

FIVE FISH KILLS IN NORTHWEST AND EAST CENTRAL IOWA

DES MOINES – The DNR investigated fish kills this week on a tributary of Otter Creek north of Ashton, on the Rock River north of Rock Valley and on the Cedar River in Cedar Rapids.

The DNR began investigations of two more fish kills Thursday in northwest Iowa. Hundreds of minnows and chubs were reported killed in the Floyd River north of Hospers. Some larger game fish were reported dead in Silver Creek, east of Ayrshire, in the other investigation.

"We think three of the four fish kills in the northwest are related to heavy rains on Saturday and Sunday that likely pushed runoff from feedlots into the streams following a long dry period," said Barbara Lynch, acting bureau chief of the DNR field services and compliance.

Lynch said that when the feedlot runoff enters a tributary, it could eliminate dissolved oxygen in the water and raise ammonia levels, resulting in a fish kill.

The DNR tentatively traced the fish kill Tuesday in the Otter Creek tributary to a 1200-head open feedlot.

A similar situation caused the fish kill on the Rock River Wednesday, with water pollution potentially tied to four open feedlots in the area just upstream of the fish kill. About 40 or 50 fish were found dead along the Rock River, including carp, quillback and suckers.

The DNR will continue the investigations and fish counts on the four northwest Iowa sites. Appropriate legal action will be determined.

Dead fish were reported to the DNR Monday in the Cedar River in Cedar Rapids. DNR investigators tested the river Monday and found normal oxygen levels and no ammonia, but did find about 50 dead redhorse, quillback and suckers north of the Five and One Dam.

Approximately 20 more partially decomposed or eaten fish were found south and north of the dam.

Possible causes of the fish kill include lack of oxygen, disease or a pollutant. Fluctuations in water level as the Cedar River dam was being repaired might have been a contributing cause.

"We have a better chance of identifying a cause if we are informed about a fishkill when it is going on," said Don Chase, environmental specialist at the Manchester DNR field office.

For more information, contact Barbara Lynch at (712) 262-4177.

DNR INVESTIGATES TWO SPILLS IN SOUTHEAST IOWA

DES MOINES – The DNR investigated two spills in southeast Iowa this week.

On August 2, the DNR responded to a report of a manure spill southwest of Troy in Davis County and traced the spill to a 743-head swine nursery facility owned by Darrel Archer.

Manure was pooled in areas of an intermittent stream with dry areas between the pools. Archer was asked to pump the pools out and land apply the manure.

The DNR visited the site again on Monday, August 5, and found additional pumping was needed. A total of about 30,000 gallons of manure was pumped. No dead fish were found.

A second spill occurred Wednesday when a mechanical failure caused an upset condition in a process tank at the Ajinomoto plant in Eddyville. Approximately 50 to 100 gallons of water with ammonia flowed into a storm sewer and then into an unnamed tributary of the Des Moines River.

Plant workers were damming the tributary one-half mile above the river when they detected ammonia levels of 10 parts per million with an elevated pH at the dam site and at the river.

Ajinomoto staff sandbagged the tributary where it enters the river and will pump water to the Cargill-Eddyville's wastewater treatment plant to be treated. The stream will be flushed with clean water that will be collected and treated also.

Depending on water temperature and acidity, ammonia levels of about eight parts per million can be deadly to fish. DNR fisheries staff investigated and observed a small number of dead fat-head minnows, chubs and green sunfish. No dead fish were observed in the Des Moines River.

The DNR will continue the investigations and determine appropriate legal actions.

For more information, contact James Stricker at (515) 725-0270 or Barbara Lynch at (712) 262-4177.

STATE OFFICIALS AWARDED GRANT FOR BACTERIAL SOURCE-TRACKING IN UPPER IOWA RIVER WATERSHED

IOWA CITY — Researchers from the Department of Natural Resources, University of Iowa Hygienic Laboratory, and the Upper Iowa River Watershed Alliance have been awarded a $20,000 grant that will help fund a one-year study in which potential sources of *E. coli* bacteria in the Upper Iowa River watershed will be assessed. The grant was awarded by the University of Iowa Center for Global and Regional Environmental Research (CGRER).

"This grant will enable the state to begin building a 'library' of bacteria DNA, which we anticipate will eventually lead to source-tracking of bacteria in Iowa watersheds," said Dr. Mary Skopec, research geologist with the DNR and supervisor of the state's ambient water monitoring program. "The ability to narrow the source of contamination from the many potential sources can aid in the creation of more targeted and cost-effective prevention efforts."

The Upper Iowa River watershed covers more than 1,000 square miles and is heavily utilized for swimming, tubing and canoeing. Potential sources of fecal bacteria in the watershed include runoff from feedlots and manure applications, inadequate septic systems, and wildlife.

Known human and animal fecal samples will be collected from sources in the Upper Iowa River watershed and "ribotyped" (simply put, their DNA will be "mapped" and recorded) to create a watershed-specific DNA library. Samples will then be collected from three different sub-watersheds. The E. coli bacteria found in these watersheds (from unknown sources) will also ribotyped, then compared to the known sources for tracking purposes.

"There may be different health risks associated with human versus animal sources," Skopec added. "Creating this library is a step in the right direction."

For more information, contact Skopec at (319) 335-1575 or mskopec@igsb.uiowa.edu.

LOW INTEREST LOANS AVAILABLE TO UPDATE SEPTIC SYSTEMS

DES MOINES — A program to assist rural homeowners with upgrading inadequate septic systems through low-interest loans is now being offered through the Iowa Department of Natural Resources.

The Onsite Wastewater Loan Program is targeted to existing substandard septic systems. New construction is not eligible for the loan program.

Iowa has an estimated 100,000 homes in rural areas with inadequate septic systems installed primarily between 1920 and 1970, according to Steve Hopkins, an environmental specialist with the DNR.

“Many of these inadequate systems were connected directly to farm tile and contribute pollution directly to streams. We’ve even had some that have been connected to ag drainage wells that go directly into groundwater sources,” Hopkins said.

The primary goal of the program is to update inadequate and failing systems. Updating systems includes adding a secondary treatment process such as a soil absorption leach field which is effective in destroying harmful bacteria and viruses, Hopkins said.

The program, utilizing money from the federal Clean Water Act and state appropriations , is a partnership with DNR, county health departments and local lenders. Low-interest loans with interest rates of 3 percent or less are offered for up to 10 years for amounts between $2,000 and $10,000. Local lenders issue the loans to qualified homeowners and as the loans are repaid, the proceeds go back into a revolving loan fund to finance additional septic system improvements.

In addition to reducing pollution, updating substandard septic systems now may help homeowners avoid problems later if they want to sell their property.

Eligibility for the on-site loan program is limited to counties having an environmental health program meeting DNR requirements.

Interested homeowners should contact their county sanitarian or environmental health department for an onsite system construction permit and then obtain bids from septic contractors for an approved onsite system. County sanitarians should have information on participating lenders to apply for a loan.

For more information, contact Steve Hopkins at (515) 725-0346.

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